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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,370	09/08/2000	Greerson G. McMullen	GEH-01-062	3577

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EXAMINER

KALINOWSKI, ALEXANDER G

ART UNIT	PAPER NUMBER
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3626

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/658,370

Applicant(s)
McMullen et al.

Examiner
Alexander Kalinowski

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 8, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 6) ☐ Other:

Recent Statutory Changes to 35 U.S.C. § 102(e)

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at www.uspto.gov or call the Office of Patent Legal Administration at (703) 305-1622.

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DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nickles et al., Pat. No. 6,144,901 (hereinafter Nickles).

As to claim 1, Nickles discloses a method for managing a transportation system (see abstract), said method comprising the steps of:

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collecting at least one set of transportation data from at least one subsystem (i.e. monitors parameters ... based on the current energy state of the train)(col. 4, line 53 - col. 5, line 5); comparing the at least one set of collected transportation data set to at least one standard transportation data (i.e. programming limits into the system such that when the limits are exceeded ...)(col. 5, lines 33-40); and generating at least one problem area data set based upon the comparison of the collected and standard data (col. 10, lines 37-58 and col. 11, lines 12-21).

As to claim 2, Nickles discloses a method in accordance with Claim 1 wherein the at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub-system, a monitoring and diagnostic sub-system and a management making sub-system (Fig. 2, Fig. 5 and col. 4, line 53 - col. 5, line 5).

As to claim 3, Nickles discloses a method in accordance with Claim 1 wherein collecting at least one set of transportation data from at least one sub-system comprises the step of collecting real-time data from at least one sub-system (col. 4, line 53 - col. 5, line 5).

As to claim 4, Nickles discloses a method in accordance with Claim 3 wherein the transportation system includes at least one vehicle, said method further comprising the step of altering a performance of the vehicle based upon the problem area data set (col. 10, lines 37-58 and col. 11, lines 12-21).

As to claim 5, Nickles discloses a method in accordance with Claim 4 wherein said step of altering the performance of the vehicle based upon the problem area data set comprises the step of

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continuously altering the performance of the vehicle based upon the real-time data (col. 4, lines 53-62 and col. 7, line 59 - col. 8, line 21).

As to claim 6, Nickel discloses a method in accordance with Claim 1 further comprising the step of identifying at least one source of delay (col. 4, lines 53-62 and col. 14, lines 31-49).

As to claim 7, Nickles discloses a method in accordance with Claim 6 wherein said step of identifying at least one source of delay comprises the step of identifying a defined quantity of largest source of delays (col. 12, line 25 - col. 13, line 54).

As to claim 8, Nickles discloses a method in accordance with Claim 1 wherein said step of identifying a defined quantity of largest source of delays comprises the step of a user selecting a number of largest source of delays(col. 12, line 25 - col. 13, line 54).

As to claim 9, Nickles discloses a method in accordance with Claim 1 further comprising the steps of determining a predicted a vehicle delay based upon the problem area data (col. 8, lines 22-31 and col. 11, lines 12-21).

As to claim 10, Nickles discloses a method in accordance with Claim 1 wherein said step of collecting at least one set of transportation data from at least one sub-system comprises the step of transmitting data between at least one sub-system and a data center utilizing at least one communication link (col. 8, lines 13-21).

As to claim 11, Nickles discloses a management system for managing a transportation system comprising:

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at least one sub-system for collecting at least one set of transportation data (i.e. monitors parameters ... based on the current energy state of the train)(col. 4, line 53 - col. 5, line 5);
a sub-system for comparing the at least one set of collected transportation data set to at least one standard transportation data (i.e. programming limits into the system such that when the limits are exceeded ...)(col. 5, lines 33-40); and
a sub-system for generating at least one problem area data set based upon the comparison of the collected and standard data (col. 10, lines 37-58 and col. 11, lines 12-21).

As to claim 12, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system includes at least one of a wayside sub-system, a locomotive sub-system, a railcar sub-system, a yard sub-system, a schedule sub system, a monitoring and diagnostic sub-system and a management or decision making sub-system (Fig. 2, Fig. 5 and col. 4, line 53 - col. 5, line 5).

As to claim 13, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system for collecting at least one set of transportation data is configured to collect real-time data from said at least one sub-system (col. 4, line 53 - col. 5, line 5).

As to claim 14, Nickles discloses a management system in accordance with Claim 13, wherein the transportation system includes at least one vehicle, said management system configured to alter a performance of at least one vehicle based upon the problem area data set (col. 10, lines 37-58 and col. 11, lines 12-21)

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As to claim 15, Nickles discloses a management system in accordance with Claim 14 wherein at least one sub-system is configured of continuously altering the performance of the vehicle based upon the real-time data (col. 4, lines 53-62 and col. 7, line 59 - col. 8, line 21).

As to claim 16, Nickles discloses a management system in accordance with Claim 11 wherein said at least one sub-system is configured to identify at least one source of delay (col. 4, lines 53-62 and col. 14, lines 31-49).

As to claim 17, Nickles discloses a management system in accordance with Claim 16 wherein said at least one sub-system is further configured to identify a pre-defined quantity of largest source of delays (col. 12, line 25 - col. 13, line 54).

As to claim 18, Nickles discloses a system comprising a plurality of sub-systems and a central data center, said system configured to:

collect at least one set of transportation data from at least one subsystem (i.e. monitors parameters ... based on the current energy state of the train)(col. 4, line 53 - col. 5, line 5);
compare said collected transportation data set to at least one standard transportation data (i.e. programming limits into the system such that when the limits are exceeded ...)(col. 5, lines 33-40);
and
generate at least one problem area data set based upon the comparison of the collected and standard data without human intervention (col. 10, lines 37-58 and col. 11, lines 12-21).

As to claim 19, Nickles discloses a system in accordance with Claim 18 comprising at least one locomotive sub-system attached to a locomotive, each said locomotive sub-system

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including a GPS receiver and a transceiver, said locomotive sub-system configured to determine a real-time absolute geographic position of the locomotive (col. 5, lines 8-10 and col. 9, lines 37-50).

As to claim 20, Nickles discloses a system in accordance with Claim 18 further configured to determine a predicted locomotive delay based upon said problem area data (col. 8, lines 22-31 and col. 11, lines 12-21).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Pat. No. 5,623,413 discloses a freight railway scheduling system.

b. Pat. No. 5,983,144 discloses a system to improve train handling performance of a rail based transportation system.

c. Pat. No. 6,332,106 discloses a method for analyzing train handling.

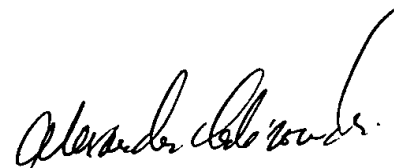
d. Pat. No. 5,904,717 discloses a graphical fleet management method.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Kalinowski, whose telephone number is (703) 305-2398. The examiner can normally be reached on Monday to Thursday from 6:30 AM to 4:00 PM. In addition, the examiner can be reached on alternate Fridays.

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If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached on (703) 305-9588. The fax telephone number for this group is (703) 305-7687 (for official communications including After Final communications labeled "Box AF").

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th Floor, receptionist.



Alexander Kalinowski

Patent Examiner

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March 7, 2003